Dynamic Balance

Performance Indicators/Teaching cues¹

- Maintains balance while using alternate stepping action "alternate"
- Maintains and upright posture "good posture"
- Maintains balance by using arms as needed "control"
- Focuses eyes forward "looking forward"

SCAN ME

	Literacy	
balance	beam	dynamic
forward	control	eyes
stability	focus	alternate

Stage 1

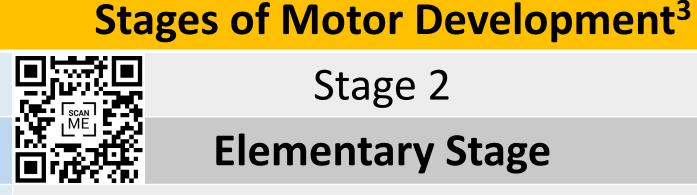
Initial Stage

Support or Side step

Balances with support,

Eyes on feet,

Uses follow step with dominant foot lead



Stage 2

Elementary Stage

Focused, Eyes on beam

Eyes focused on beam, Loses balance easily

Uses alternate stepping action



Stage 3

Mature Stage

Relaxed, Eyes forward

Eyes focused beyond beam Movements are fluid Relaxed, and in control May lose balance rarely

Pre	or	Po	st A	Asse	essr	ner	nt													
Directions ² : Walk across a balance beam forward for 10 steps	Students (example n=20)																			
Performance Indicators ¹	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Maintains balance while using alternate stepping action																				
Maintains and upright posture Maintains balance by using arms as needed																				
Focuses eyes forward																				
Total # of Performance indicators met																				
Developmentally Appropriate Progressions ^{3,4} I: Initial / Emerging: Limited indicators visible in any context E: Elementary / Able: Some indicators in closed contexts M: Mature / Competent: All indicators in closed contexts																				

Developmentally Appropriate Progressions

Initial Stage / Emerging

Walk in a straight pathway

- Walk in a straight pathway on a line
- Walk in straight line heel to toe
- Walk in different pathways (straight, zigzag, curved)
- Walk at different levels (low, medium, high)
- Walk at different levels on lines (low, medium, high)
- 7. Walk while changing directions (forward, backward, sideway)
- Walk while changing directions on lines (forward, backward, sideway)
- 9. Walk while changing speed (slow, fast)
- 10. Walk while changing speed on lines (slow, fast)
- 11. Walk on numbers or abc poly spots that are somewhat far away so they have to stretch their bodies to get there. At times they may lose their balance – talk about what to do with your body when they become unstable (far, near)
- 12. Walk across wide gymnastic equipment (wide beam, bench) and repeat tasks # 3-10
- 13. Side step on wide beam (4"/ 10 cm) with and then without support
- 14. Side step on narrow beam (2.5"/ 6 cm) with and then without support
- 15. Alternate stepping on narrow beam while supported by teacher straddling the beam while walking backwards

Elementary Stage / Able

- 16. Alternate stepping on narrow beam while slowly removing the level of support by teacher
- 17. Walk across narrow beam with low level support using extended arms for support
- 18. Walk across narrow beam with extended arms without support
- 19. Walk across the narrow beam while balancing a bean bag on shoulders (posture)
- 20. Walk across narrow beam at different levels (low, medium, high)
- 21. Walk across the narrow beam stepping over beanbags (levels)
- 22. Walk across the narrow beam and pick up an object without losing balance (levels)
- 23. Looking at the narrow beam, walk across as smoothly as you can.
- 24. Walk across wide balance beam with support (teach them how to scoop – looking forward, moving foot downwards next to beam when moving)
- 25. Walk across wide balance beam while scooping without support

Mature Stage / Competent

- 26. With eyes forward walking across narrow beam while scooping with support (eyes)
- 27. With eyes forward walking across narrow beam while scooping without support (eyes)
- 28. With eyes forward walking across wide beam while scooping and balancing a beanbag on their head (eyes, posture)
- 29. With eyes forward walking across narrow beam while scooping and balancing a beanbag on their head (eyes, posture)
- 30. With eyes forward walking across narrow beam at different levels (low, medium, high)
- 31. With eyes forward walking across the narrow beam stepping over beanbags (levels)
- 32. With eyes forward walking across the narrow beam and pick up an object without losing balance (levels)
- 33. With eyes forward walking across the narrow beam while identifying numbers or letters held up by the teacher (eyes)
- 34. Looking forward, walk across a narrow beam as smoothly/relaxed as you can. (control)
- 35. Combine various movement concepts while walking on lines or across low beams.
- 36. Combine various locomotor skills and movement concepts with on lines or across low beams.

Difficulties to watch for¹ If... Then... They are not able to keep their balance using their arms Allow them to perform the skill while balancing light objects on shoulders They have difficulty alternating steps Allow for external support (wall or bar) Children are visually checking their feet or beam Encourage children to keep their head up by looking at something on the wall Children have difficulty maintaining balance Start with short distance and gradually increase length

- PHE Canada (2011). Fundamental movement skills: An educator's guide to teaching fundamental movement skills.
- Ulrich, D. (2000). Test of Gross Motor Development, 2nd ed. (TGMD-2) Assessment protocol
- Gallahue, D., Ozmun, J., & Goodway, J. (2007). Understanding motor development: Infant, children, adolescents, adults (7th ed.). McGraw Hill: New York, NY. 5. Poster created by Drs. Helena Baert & Matthew Madden, SUNY Cortland, 2016
- **References Continued:**
- 4. Baumgarten, S. & Langton, T. (2006). Elementary Physical Education: Building a Solid Movement Foundation. Stipes Publishing L.L.C.: Champaign, IL.

Static Balance

Performance Indicators/Teaching cues¹

- Maintains a steady balance "control"
- Adjusts body to maintain balance "correct"
- Focuses eyes forward "looking forward"

Instructional Video QR ⁵	

	Literacy	
balance	static	on
eyes	freeze	off
stability	focus	stillness



Stage 1

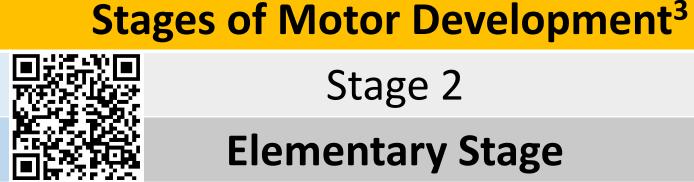
Initial Stage

High Knee

Raises non supporting leg several inches so that thigh is nearly parallel with surface Very unstable

Overcompensates

balances with outside support



Stage 2

Elementary Stage

Tied-in Leg

May lift non supporting leg to a tied-in position on support leg

Performs better on dominant leg Uses arms for balance but may keep on at side Cannot balance with eyes closed

Stage 3

Mature Stage

Relaxed

Can balance with eyes closed Uses arms and trunk as needed Changes to non dominant leg

Pre or Post Assessment

Directions²: Stork stance on one leg and then on the opposite leg hold for 30 seconds

Students (example n=20)

Hold for 50 seconds								Stu	uem	.5 (EX	amp	IE 11-	-20)							
Performance Indicators ¹	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Maintains balance and stays in control																				
Maintains and upright posture																				
Maintains balance by using arms as needed																				
Focuses eyes forward																				
Total # of Performance indicators met																				
Developmentally Appropriate Progressions ^{3,4} I: Initial / Emerging: Limited indicators visible in any context E: Elementary / Able: Some indicators in closed contexts M: Mature / Competent: All indicators in closed contexts																				

Developmentally Appropriate Progressions

Initial Stage / Emerging

- Balance with two feet apart for 5 count (wide base)
- Balance with two feet on a poly spot for 5 count (narrow base) – maintaining stillness
- 3. Same as #1 but with bean bags on different body parts
- 4. Same as #2 but with bean bags on different body parts
- Balance with arms extended (extensions) symmetrically with wide base
- Balance with arms extended (extensions) asymmetrically with wide base 7
- 7. Attempt #1 through #4 with eyes closed.
- Balance on poly spot on dominant leg with support
- 9. Same as #8 but with bean bag on body part and holding for 5 counts
- 10. Balance on poly spot on other leg with support
- 11. Same as #10 but with bean bag of body parts and holding for 5 counts
- 12. Do different balance tricks on mats: Balance on 3 body parts for example
- 13. Create shapes with body holding the shape for 5 counts
- 14. Create letters with body holding the letter for 5 counts
- 15. Use the balance board with support

Elementary Stage / Able

- 16. Balance on preferred leg without support
- 17. Same as #18 but focusing on tightening muscles and creating stillness
- 18. Same as #18 but balancing bean bags on different body parts.
- 19. Balance on bean bags with 2 legs with eyes open (uneven surface)
- 20. Same as #20 but with eyes closed
- 21. Balance on 2 by 4 on ground
- 22. Balance on 1 leg trying to pick up something of the floor
- 23. Balance on one leg trying to strike a balloon
- 24. Balance on one leg on a low beam
- 25. Balance on one leg on a higher beam
- 26. Balance on non-preferred leg without support
- 27. Repeat #19-26 using non-preferred leg
- 28. Counterbalances 1 leg and opposite arm (extensions to side of body)
- 29. Symmetrical and asymmetrical shapes while balancing on 1 leg.
- 30. Combining dynamic and static balance
- 31. Play shadow balance, show what tricks you have up your sleeve
- 32. Play mirror balance, show what tricks you have up your sleeve
- 33. Play twister with a friend (different bases of support – great assessment tool)

Mature Stage / Competent⁴

- 34. Perform different balance tricks on mats such as: V-sit, knee scale, Stork stance, airplane scale, Y scale and other variety of static balances
- 35. Same as #31 but with bean bags on body parts and holding the poses for a longer count
- 36. Same as #31 but on sturdy surfaces off the ground (e.g. boxes, benches, beams)
- 37. Inverted balances
- 38. Transferring weight from feet to hands in preparation for handstand (kick-ups)
- 39. Doing different balances and exploring combing balance with different movement concepts (e.g. static balance using stork stance in unison with a partner)
- 40. Balance tricks with a partner
- 41. Combine static and dynamic balances in a sequence
- 42. Assessment provide students with a balance task that combines movement concepts and skills and have them perform.

Difficulties to watch for¹ Then...

If... They are not able to keep their balance by using their arms They have difficulty alternating steps

Allow them to perform the skill while balancing light objects on shoulders Allow for external support (wall or bar)

Encourage children to keep their head up by looking at something on the wall

References Continued:

Children have difficulty maintaining balance Start with short distance and gradually increase length

4. Baumgarten, S. & Langton, T. (2006). Elementary Physical Education: Building a Solid Ulrich, D. (2000). Test of Gross Motor Development, 2nd ed. (TGMD-2) Assessment protocol Movement Foundation. Stipes Publishing L.L.C.: Champaign, IL.

References:

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- Gallahue, D., Ozmun, J., & Goodway, J. (2007). Understanding motor development: Infant, children, adolescents, adults (7th ed.). McGraw Hill: New York, NY. 5. Poster created by Drs. Helena Baert & Matthew Madden, SUNY Cortland, 2016 Malmberg E. (2003). Kidnastics: A child centered approach for teaching gymnastics. Human Kinetics: Champaign, IL.
- From J. Barrett & C. Scaini, 2019, Physical and health education in Canada (Champaign, IL: Human Kinetics).

Children are visually checking their feet or beam

Locomotor: Running

Performance Indicators/Teaching cues¹

- Eyes focused forward throughout the run "look ahead"
- Knees bend at right angles during the recovery phase "high knees"
- Arms bend at elbows and move in opposition of legs "pump arms"
- Front part of foot contacts ground "light feet"
- Body leans slightly forward "lean forward"





	Literacy	
run	slow	fast
straight	curved	zig zag
forward	left	right

Stages of Motor Development³

No flight

Stage 1

Initial Stage

Run High Guard Arms - high guard Flat Footed contact Short, wide stride Wide shoulder width Legs & arms swing out



Stage 2

Stage 3

Elementary Stages

Run Middle Guard Arms- middle guard Vertical component still great Increase stride Increase arm swing

Heel-Toe Arms Extended Arms- low guard Arms opposition – elbows nearly extended Heel-toe contact

Stage 4



Pumping Arms Heel-toe contact (toe-heel when sprinting) Arm-leg opposition High heel recovery **Elbow Flexion**

Pre or Post Assessment

Directions²: Run as fast as possible between 2 cones set 60 feet



Students (example n=20)

9 10 11 12 13 14 15 16 17 18 19 20

apart

Eyes focused forward throughout the run Knees bend at right ankles during recovery phase Arms bend at elbows and move in opposition of legs Front part of foot contacts the ground

Body leans slightly forward

Total # of Performance indicators met

Developmentally Appropriate Progressions^{3,4}

I: Initial / Emerging: Limited indicators visible in any context E: Elementary / Able: Some indicators in closed contexts M: Mature / Competent: All indicators in closed contexts

Developmentally Appropriate Progressions

Initial Stage / Emerging

1. Walk in a straight line

Performance Indicators¹

- 2. Exploring movement concepts: Walk in different pathways (straight, curved, zig zag), walk at different levels (high, medium, low), walk in different directions (forward, sideways, backwards), walk quietly and loudly (force), in self-space or between 2 cones.
- 3. Walk in an open space around obstacles (station: around, over, through, across)
- 4. Walk in an open space around obstacles changing speeds (station)
- 5. Teach students how to freeze on command (e.g. Freeze! Hands on Knees)

Practice freezing on command throughout all tasks. (slow and fast – walking vs running)

- 6. Walk in an open space around obstacles with a peer (station) staying in self-space (eyes up)
- 7. Walk in an open space around obstacles changing speeds with a peer (station) staying in self-space (eyes up)
- 8. Continue with #5 and 6 adding more peers and space (space, relationship with others, speed)
- 9. Walk following the teacher in different pathways
- 10. Walk with peers in different pathways (leading and following)
- 11. Culminating event: bear hunt using walking

Elementary Stage / Able

- 12. Run in a straight line (station between 2 cones)
- 13. Run as fast as you can between 2 cones, 20 feet apart
- 14. Run as fast as you can between 2 cones, choose the distance
- 15. Run while pumping your arms back and forth
- 16. Repeat Tasks #2-5 with running (limit space to small group/space)
- 17. Run between 2 cones and on a signal turn around and run back
- 18. Travelling in open space to the music
- 19. Teacher designed obstacle course focusing on different speeds and pathways (e.g. walk zig zag, run straight)
- 20. Students will create their own pathways with ropes/cones and explore the area using walking and running (teacher assist)
- 21. On the signal students will run the pathway as directed by the teacher (station – open space)
- 22. Repeat #6-10 with running (space, effort, and relationship)
- **Keep the number of students limited to 4 and space large ***

Mature Stage / Competent

- 23. Red light, green light, walking/running/stopping from one side of gym to other with large group
- 24. Run in open space dodging others and listening or watching for signals from teacher (stop, run, walk, "look up").
- 25. Run in general space with peers while following different instructions from teacher (example: 1 clap = run & touch 4 walls, 2 claps = 5 jumping Jacks or Janes, 3 claps = walk and high 5 peers). Increase the number of instructions from 1 to 3 and change the tasks from simple to complex.
- 26. Repeat #24 but add obstacles such as hula hoops, low apparatus, spots, ropes, cones (example: 1 clap= run & touch 3 different obstacles, 2 claps= balance on low safe obstacles, 3 claps= 5 star jumps)
- 27. Creating movement sentences with a partner incorporating running and movement concepts (MC) (e.g. I run fast with a partner in general space).
- 28. Introduce the skill of dodging (changing direction quickly) and students will dodge stationary objects while running.
- 29. Dodge other moving students while running in a large space (entire gym)
- 30. Dodge other moving students while decreasing the size of the general space (1/2 gym, 1/4 gym)
- 31. Run through a maze or obstacle course w/others
- 32. Culminating event: Appropriate Tag Games

Difficulties to watch for¹

Coach them to run along a line

If... Then...

There are small steps and little flight Show them how to exaggerate the length of the stride

Feet are spread too wide apart

Children have short strides Place bean bags on a line so they can widen their stride

Stand still and only move arms, arms should not cross and hands can lightly brush hips Arms swing from side to side

Children lean too far forward Run on toes and stay as tall as possible

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- 5. Poster created by Drs. Helena Baert & Matthew Madden, SUNY Cortland, 2016

Locomotor: Leaping

Performance Indicators/Teaching cues¹

- Forward movement sustained throughout the leap "move forward"
- Eyes focused forward "looking ahead"
- Take off from one foot, land on opposite foot "opposite feet"
- Straighten legs in flight, arms in opposition "straight legs"
- Controlled landing without losing balance "control"

Instructional Video QR⁵



Lite	racy
run	leap
air	extend
forward	over

Stages of Motor Development³

Elementary Stages



Stage 1

like another running step /

Arms ineffective

Inconsistent use of take-off leg

nitial Stage

Inconsistent Run Child appears confused in attempts

Elongated Run Appears to be thinking through the Inability to push off and gain distance action / Attempt looks like elongated run / Little elevation above and elevation / Each attempt looks

trunk lean

Stage 2

supporting surface / Little forward

Stiff Stiff appearance in trunk Incomplete extension of legs during flight / Arms used for balance, not as aid in force production

Stage 3

Mature Stage

Stage 4



Controlled Extension Relaxed rhythmical action Forceful extension of takeoff leg Good summation of horizontal and vertical forces / Definite forward trunk lean / Definite arm opposition Full extension of legs during flight

Pre	e or	Po	st A	\sse	essr	mer	nt													
Directions ² : Run and then leap over beanbag starting from tape																				
	Students (example n=20)																			
Performance Indicators ¹	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Forward movement throughout the leap																				
Takes off from one foot and lands on the other																				
Legs are straight in flight and arms are in opposition																				
Focuses eyes forward																				
Controlled landing without losing balance																				
Total # of Performance indicators met																				
Developmentally Appropriate Progressions ^{3,4} I: Initial / Emerging: Limited indicators visible in any context E: Elementary / Able: Some indicators in closed contexts M: Mature / Competent: All indicators in closed contexts																				

Developmentally Appropriate Progressions

Initial Stage / Emerging

- Check ability to run/jump
- Run as high as you can in the air Run quickly with short steps, then leap forward in a giant step through the air
- *** Encourage students to use a running approach, one leap and landing on two feet
- 4. Leap forward with strong (loud, hard) landing
- 5. Leap forward with light (quiet, soft) landing
- Leap forward on a line on the floor
- Leap forward over a line on the floor
- Leap into a hula hoop / large target
- Leap forward slowly
- 10. Leap forward fast

Elementary Stage / Able

- ***Encourage students to use a running approach, one leap and landing on opposite foot to slow the pace of the run
- 11. Place one rope 5 feet away from the start of the approach, run fast over the rope
- 12. Place two ropes parallel 5 feet away from the start of the approach and run as fast as possible over the ropes
- 13. Slowly increase the distance between the ropes, telling the students it is a river and we can't fall in so we must leap across. Encourage to run as fast as possible and leap high in the air to get across the river.
- 14. Leap near and far (vary distances between the 2 parallel ropes "wide vs narrow river")
- 15. To encourage proper stride position during flight, in the gymnasium, use a flash light to help students see their shadow. If outside, check shadow produced by sun.
- 16. Leap over a beanbag or small object
- 17. Leap over a larger object (pool noodle)

Mature Stage / Competent

- 18. Have students explore leaping on their nondominant side (run-leap-run)
- 19. Have students explore the following pattern: run, leap, leap, run.
- 20. Leaping in a rhythmic pattern with music
- 21. In general space, ask students to demonstrate a variety of locomotor movements including leaping
- 22. Same as #19 but with music
- 23. Move through an obstacle course set up to include leaping
- 24. Leap over low hurdles continuously (run-runrun-leap, run-run-run-leap)
- 25. Leaping and catching an object in flight
- 26. Teacher designs a dance routine that includes leaping and other locomotor skills for students to attempt
- 27. Teacher designs a gymnastics routine that includes leaping and other locomotor skills for students to attempt

	Difficulties to watch for ¹
If	Then
Child is showing insufficient extension of legs and body on takeoff	Ask the child to leap over horizontal target, gradually increasing the distance between takeoff and target
Child is using ineffective arm swing	Encourage the child to use arms to move through the air
Arms are behind or beside on landing	Encourage children to keep their head up by looking at something on the wall

- References: PHE Canada (2011). Fundamental movement skills: An educator's guide to teaching fundamental movement skills.
- Ulrich, D. (2000). Test of Gross Motor Development, 2nd ed. (TGMD-2) Assessment protocol
- Gallahue, D., Ozmun, J., & Goodway, J. (2007). Understanding motor development: Infant, children, adolescents, adults (7th ed.). McGraw Hill: New York, NY. 5. Poster created by Drs. Helena Baert & Matthew Madden, SUNY Cortland, 2016

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Locomotor: Galloping

Performance Indicators/Teaching cues¹

- Keeps trail leg behind lead leg "trail leg"
- Gallops using either leg as lead "lead leg"
- Displays rhythmical arm movement "arms move with beat"
- Turns hips, shoulders, and eyes to direction of movement "twist to direction"



	Literacy	
gallop	horse	forward
rhythm	open	close
lead	follow	trail

Stages of Motor Development³

Arms of little use

Stage 1

Initial Stage

Choppy Run

Resembles rhythmically uneven run Trail leg crosses in front of lead leg during airborne phase, remains in front at contact



exaggerated

Stage 2

Elementary Stage

Stiff Back Leg Slow-moderate tempo, choppy rhythm Trail leg stiff Hips often oriented sideways Vertical component



Stage 3

Mature Stage

Smooth Rhythmical

Smooth, rhythmical pattern, moderate tempo Feet remain close to ground Hips oriented forward

Pro	e oı	r Po	st A	Asse	essr	ner	nt																
Directions²: Have the child gallop from one cone to the other for about 25 feet								Stu	dent	dents (example n=20)													
Performance Indicators ¹	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
Keeps trail leg behind lead leg																							
Gallops using either leg as lead																							
Displays rhythmical arm movement																							
Turns hips, shoulders, and eyes to direction of the movement																							
Total # of Performance indicators met																							
Developmentally Appropriate Progressions ^{3,4}																							
I: Initial / Emerging: Limited indicators visible in any context																							
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Developmentally Appropriate Progressions

Initial Stage / Emerging

Moving body in different shapes, feet together (narrow) feet apart (wide) in straddle stance

- 2. Explore bases of support using narrow and wide foot placement (front and back)
- 3. Traveling in directions (right, left)
- Traveling forward, backwards, sideway
- Scissor jumps or forward shuffle
- 6. Students travel slowly on a line with their preferred 1 leap foot and 1 trail foot (cue: step, together) – assess whether their trail leg crosses the lead leg
- Place stickers on dominant heel and nondominant toe to encourage the trail leg to stay behind the lead leg (ask students to gallop by making the stickers touch)
- 8. See 7 for task, switch stickers to non-dominant heel and dominant toe
- the cues: step, together.
- 10. See 9 both switch lead leg

Elementary Stage / Able

Progression occur in a closed environment

- 11. Galloping on a line using different speeds
- 12. Galloping in different pathway (zig-zag, straight, curved)
- 13. Galloping in different directions (forward, right, left, diagonal)
- 14. Galloping at different levels
- 15. Galloping while changing speeds and directions
- 16. Galloping while changing different speeds on different pathways
- 17. Galloping at different levels while changing speeds
- 18. Galloping in different pathways while changing levels
- 19. Galloping through an obstacle course using over, through, around (varying apparatus)

Progressions occur in an open environment

- Increase speeds traveling on a line and include 20. Galloping in a large space (general space) with other students while paying attention to self-space (bubble) careful not to "pop" other students bubbles
 - 21. Galloping in different directions/or pathways while changing speeds

Mature Stage / Competent

- 22. Student gallop while following the rhythm of the music
- 23. Changing speeds to music
- 24. Galloping to the music while changing directions, pathways, and levels
- 25. Galloping while shadowing each others movement (one partner in front and other behind)
- 26. Galloping while shadowing your partner and changing directions, pathways, levels, and speeds
- 27. Galloping while matching a partner (student standing next to each other)
- 28. Galloping while matching a partner: matching different pathways, speeds, and directions
- 29. Galloping while chasing, fleeing, dodging with a partner
- 30. Galloping with a partner to rhythm of the music
- 31. The combination of multiple locomotor skills (including galloping) to create routines

Difficulties to watch for ¹										
If	Then									
Trail leg crosses lead leg	Use colored tape / stickers to dominant heel and non-dominant toe to make tape touch									
There is a lack of rhythm in the gallop	Use music where the sound of horses running dictate the rhythm									
Movements are exaggerated	Encourage the children to lift their feet just off the ground									
Slight loss of balance from time to time	Have the child slow the gallop down									
Children are landing flat footed	Ask children to see if they can make their gallops as "quiet" as possible									

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- Ulrich, D. (2000). Test of Gross Motor Development, 2nd ed. (TGMD-2) Assessment protocol Gallahue, D., Ozmun, J., & Goodway, J. (2007). Understanding motor development: Infant, children, adolescents, adults (7th ed.). McGraw Hill: New York, NY. 5. Poster created by Drs. Helena Baert & Matthew Madden, SUNY Cortland, 2016
- **References Continued:**
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Locomotor: Sliding

Performance Indicators/Teaching cues¹

- Keeps trail leg behind lead leg "trail leg"
- Legs open and close in sliding "open and close"
- Displays rhythmical arm movement "arms move with beat"
- Sideways movement while facing in the direction you are going "sideways"



Literacy											
slide	sticky	forward									
sideways	open	close									
lead	focus	follow									

Stages of Motor Development³



Stage 1

Initial Stage

Choppy Run

Resembles rhythmically uneven run Trail leg crosses in front of lead leg during airborne phase, remains in front at contact Little arm action



Stage 2

Elementary Stage

Stiff Back Leg

Slow-moderate tempo, choppy rhythm Trail leg stiff, Hips often oriented sideways Vertical component exaggerated



Stage 3

Mature Stage

Smooth Rhythmical

Smooth, rhythmical pattern, moderate tempo Feet remain close to ground, hips oriented forward Moving sideways while facing in direction of movement

Pre or Post Assessment

Directions²: Have the child slide from one cone to the other for about 25 feet

Students (example n=20) 10 11 12 13 14 15 16 17 18 19 **Performance Indicators**¹ Keeps trail leg behind lead leg Legs open and close in sliding Displays rhythmical arm movement Sideways movement while facing in the direction you are going **Total # of Performance indicators met Developmentally Appropriate Progressions**^{3,4} I: Initial / Emerging: Limited indicators visible in any context E: Elementary / Able: Some indicators in closed contexts M: Mature / Competent: All indicators in closed contexts

Developmentally Appropriate Progressions

Initial Stage / Emerging

Explore different body shapes where feet are Progression occur in a closed environment

- narrow (together) or feet are wide (apart)
- Explore bases of support using narrow and wide foot placement
- Traveling in directions
- Traveling forward, backwards, sideway
- Side to side shuffle in general space
- 6. Students lineup on a circle (center court-three point line) and practice moving side to side with toes pointed to the center
- 7. Students travel slowly on a line with a side shuffle step or slide step (cue: open closed)
- Repeat #7 and increase speed of steps
- 9. On a scooter, students work on moving feet side to side while moving he scooter sideway (the focus if for student to "not" cross their feet)
- 10. While sitting on a scooter, students move sideways with the focus of not crossing their feet while on a line (combine progressions 6 & 9).

Elementary Stage / Able

- 11. Sliding on a line using different speeds
- 12. Sliding in different pathway (zig-zag, straight, curved)
- 13. Sliding in different directions (right, left, diagonal)
- 14. Sliding at different levels
- 15. Sliding while changing speeds and directions 26. Sliding while mirroring your partner (student face)
- 16. Sliding while changing different speeds on different pathways
- 17. Sliding at different levels while changing speeds
- 18. Sliding in different pathways while changing levels
- 19. Sliding through an obstacle course using over, under, around (varying apparatus)

Progressions occur in an open environment

- 20. Sliding in a large space (general space) with other students while paying attention to self space and not "pop" other students bubbles.
- 21. Sliding in different directions/or pathways while changing speeds

Mature Stage / Competent

- 22. Student slide while following the rhythm of the music
- 23. Changing speeds to music
- 24. Sliding to the music while changing directions, pathways, and levels
- 25. Sliding while shadowing each others movement (one partner in front and other behind)
- each other) 27. Sliding while mirroring your partner and changing
- directions, pathways, levels, and speeds
- 28. Sliding while matching a partner (student standing next to each other)
- 29. Sliding while matching a partner: matching different pathways, speeds, and directions
- 30. Sliding with a partner to rhythm of the music
- 31. Sliding while mirroring a partner, tossing a soft ball to each other
- 32. Sliding with a partner mirroring, tossing a soft ball to each other with a bounce
- 33. Sliding with a partner mirroring, tossing a soft ball to each other while increasing the distance apart
- 34. The combination of multiple locomotor skills (including sliding) to create routines

	Difficulties to watch for ¹
If	Then
Students cross legs	Practice the open/close slowly and increase speed gradually
There is a lack of rhythm in the slide	Clap the rhythm for children
Movements are exaggerated	Encourage the children to lift their feet just off the ground
Slight loss of balance from time to time	Have the child slow the slide down slide on a line
Children are landing flat footed	Ask children to see if they can make their slides as "quiet" as possible

- PHE Canada (2011). Fundamental movement skills: An educator's guide to teaching fundamental movement skills.
- Ulrich, D. (2000). Test of Gross Motor Development, 2nd ed. (TGMD-2) Assessment protocol Gallahue, D., Ozmun, J., & Goodway, J. (2007). Understanding motor development: Infant, children, adolescents, adults (7th ed.). McGraw Hill: New York, NY. 5. Poster created by Drs. Helena Baert & Matthew Madden, SUNY Cortland, 2016
- **References Continued:**
- 4. Baumgarten, S. & Langton, T. (2006). Elementary Physical Education: Building a Solid Movement Foundation. Stipes Publishing L.L.C.: Champaign, IL.

Locomotor: Horizontal Jumping

Stages of Motor Development³

Elementary Stages

Performance Indicators - Teaching cues¹

- Eyes focused forward "look ahead"
- Bends knees and body at waist in preparation for jump "bend then explode"
- Swings arms fully in a backward-forward direction "swing"
- Extends body in flight and lands with bent knees "expand"
- Takes off and lands on two feet "soft feet"





Literacy									
jump	over								
near	far								
light	bend								
on	off								

Arms act as "brakes"

Legs not extended

Large vertical component

Stage 1

nitial Stage

Stage 2

Stage 3

Mature Stage

Stage 4

Braking arms Winging Arms

Arms act as "wings" Vertical component still great Legs near full extension

Arms swing to head Arms move forward, elbows in front of trunk at takeoff Hands to head height Take-off angle still above 45% Legs often fully extended

Full Body Extension Complete arm and leg extension at takeoff, takeoff near 45 degree angle Thighs parallel to surface when feet contact for landing

Pre or Post Assessment																				
Directions ² : Have a starting line on the floor tell the child to jump as far as they can	Students (example n=20)																			
Performance Indicators ¹	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Eyes focused forward																				
Bends knees and body at waist in preparation for jump																				
Swings arms fully in a backward-forward direction																				
Extends body in flight and lands with bent knees																				
Takes off and lands on two feet																				
Total # of Performance indicators met																				
Developmentally Appropriate Progressions ^{3,4} I: Initial / Emerging: Limited indicators visible in any context E: Elementary / Able: Some indicators in closed contexts M: Mature / Competent: All indicators in closed contexts																				

Developmentally Appropriate Progressions

Initial Stage / Emerging

- Bend your knees and crouch low, come back up and reach high, stretch high, push feet against floor
- 2. Have student jump to hit target that is above their head and land lightly (SPRING)
- 3. Jump and light showing an S with your body in balance (SSSSS)
- 4. Jump forward with hard (loud, strong) landing
- 5. Jump forward with soft (quiet, light) landing
- 6. Jump forward on a line on the floor
- 7. Jump forward over a line on the floor
- 8. Jump forwards and backwards
- 9. Jump sideways
- 10. Jump over a rope on the floor
- 11. Jump in and out of a hoop that is on the floor
- 12. Jump in front, behind, and along side a hoop
- 13. Jump forward slowly
- 14. Jump forward quickly
- 15. Jump with your feet straddled then together, slowly then increase speed (open, closed)
- 16. Play music and have students jump to the beat (slow, medium, fast)

Elementary Stages / Able

- 17. Jump forward and strike a ball down to encourage arms moving forward from winged arms
- 18. Jump off a heightened box (start small)
- 19. Jump off a box but into a hula hoop with controlled landing
- 20. Jump off a box with extension in flight and controlled landing
- 21. Place three small hula hoops in front of hoop, choose a hoop to jump (extensions, far & near)
- 22. Place two cones with a noodle across in front of hoop, jump from box over the noodle (extension, far & near)
- 23. Jump off a box and land sideways in balance (90both sides)
- 24. Jump off, turn and land backwards (180)
- 25. Jump off, turn and land forwards (360)
- 26. Jump on a heightened box
- 27. Jump over a slow moving rope, a fast moving rope
- 28. Jump and mark your landing with a beanbag. Try to jump farther next time (near and far).
- 29. Jump over a heightened box
- 30. Jump across the general space using different pathways (straight, zigzag, curved)

Mature Stage / Competent

- *** all performance indicators should be met prior to combining skills***
- 31. Jump off a box and make different shapes (straight, wide, round, narrow, twisted, star, symmetrical, asymmetric) while landing softly and safely.
- 32. Jump over separated ropes (river) on the floor, move ropes farther away to jump for distance (maximum length would be child's own length)
- 33. Jump through an obstacle course which includes using a variety of movement concepts in combination
- 34. Create a routine with different jumps, shapes, and turns (off a box or on the floor)
- 35. Create a routine with a variety of locomotor skills and movement concepts
- 36. Combine jumping and catching a ball in a controlled environment
- 37. Combine running, jumping and catching in a controlled environment

Difficulties to watch for¹

If... Then... Ask the child to jump over a horizontal target, gradually increasing the distance between Child is showing insufficient extension of legs and body at takeoff take off and object. Encourage the child to rock forward in a heel-to-toe motion while coordinating arm swing Child is using ineffective arm swing in the jump Child is falling backward on landing Encourage the child to reach forward on landing Arms are beside or behind on landing Use cue words as a reminder (reach forward)

References:

- PHE Canada (2011). Fundamental movement skills: An educator's guide to teaching fundamental movement skills.
- Ulrich, D. (2000). Test of Gross Motor Development, 2nd ed. (TGMD-2) Assessment protocol

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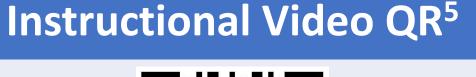
Gallahue, D., Ozmun, J., & Goodway, J. (2007). Understanding motor development: Infant, children, adolescents, adults (7th ed.). McGraw Hill: New York, NY. 5. Poster created by Drs. Helena Baert & Matthew Madden, SUNY Cortland, 2016

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Locomotor: Hopping

Performance Indicators/Teaching cues¹

- Takes off on one foot and lands on the same foot "one foot"
- Holds knee behind body at 90 degree angle "make an L shape"
- Uses arms for lift "arms"
- Displays rhythmical hopping "hop to a beat"
- Maintains balance "controlled"





	Literacy	
hop	control	swing
L shape	1 foot	up
balance	rhythm	down

Stages of Motor Development³

Stage 1

nitial Stage

Foot in Front

Nonsupport foot in front with thigh parallel to floor Body erect Hands shoulder height



Stage 2

More body lean forward

Bilateral arm action

Stage 3

Elementary Stages

Foot Behind Support Leg Foot Behind Support Leg Nonsupport thigh vertical with foot Nonsupport thigh vertical with foot behind support leg, knee flexed behind support leg, knee flexed More body lean forward Bilateral arm action



Stage 4

Mature Stage

Perpendicular Free Leg Nonsupport leg is bent, knee pumps forward and back in perpendicular action, forward body lean Arm opposition with swing leg

Pre or Post Assessment																				
Directions ² : Have the child hop three times on one foot and then the other foot Students (example n=20)																				
Performance Indicators ¹	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Takes off on one foot and lands on the same foot																				
Holds knee behind body at 90 degree angle																				
Uses arms for lift																				
Displays rhythmical hopping while maintaining balance																				
Total # of Performance indicators met																				
Developmentally Appropriate Progressions ^{3,4}																				
I: Initial / Emerging: Limited indicators visible in any context																				
E: Elementary / Able: Some indicators in closed contexts																				
M: Mature / Competent: All indicators in closed contexts																				

Developmentally Appropriate Progressions

*** use hopping in combination with other locomotor skills to prevent fatigue***

Initial Stage / Emerging

**Hopping in self-space

- Balance on preferred leg without support
- Balance on preferred leg focusing on tightening muscles and creating stillness
- Balance on preferred leg while placing bean bags on different body parts
- 4. Same as #1 but with eyes closed
- Balance on 1 leg trying to pick up something of the floor
- 6. Counterbalances 1 leg and opposite arm (extensions to side of body)
- 7. Symmetrical and asymmetrical shapes while balancing on 1 leg
- Hop off one foot and land on two feet inside a hula-hoop
- 9. Hop off non-dominate leg and land on two feet inside of a hula-hoop
- 10. Hop off one foot and land on one foot
- 11. Same as #10 on non-dominate foot
- 12. Hop continuously 3-5 times in self-space on dominant leg
- 13. Hop continuously 3-5 times in self-space on non-dominant leg
- **Encourage keeping non-hopping leg close to the ground, avoid high knee

Elementary Stage / Able

- ** Travelling while hopping in closed environment
- 14. Hop in a straight line between 2 cones 15. Hop in different pathways (straight, curved, zig zag) in self-space or between 2 cones
- 16. Hop as fast as you can between 2 cones, 20 feet apart
- 17. Hop as fast as you can between 2 cones, choose the distance
- 18. Hop while pumping your arms back and forth (alternating arms)
- 19. Hop between 2 cones and on a signal turn around and hop back
- 20. Hop between 2 cones and on signal hold a static balance pose on 2 feet
- 21. Hop between 2 cones and on signal hold a static balance pose on 1 foot for 3 seconds
- 22. Hop to the left and to the right in open space (station work)
- 23. Hop quietly and loudly (force) in open space (station work)
- 24. Hop in an open space around obstacles (station: around cones, over lines, between cones, across lines)
- 25. Hop in an open space around obstacles changing speeds (station)

Mature Stage / Competent

26. Hop with partner in different pathways (leading and following)

**Travelling while hopping in open environment

- 27. Hop in an open space around obstacles with a partner (station) staying in self-space (eyes up)
- 28. Hop in an open space around obstacles changing speeds with a partner (station) staying in self-space (eyes up)
- 29. Continue with #27 and 28 adding more people and space (space, relationship with others, speed)
- 30. Travelling in open space to the music (slow and fast – walking vs running and hopping vs. jumping)
- 31. Teacher designed obstacle course focusing on different locomotor skills (including hopping), speeds and pathways (e.g. walk zig zag, hop straight)
- 32. Students will create their own pathways with ropes/cones and explore the area using hop and jumping (teacher assist)
- 33. On the signal students will run the pathway as directed by the teacher (station – open space)
- 34. Repeat #32-33 with hopping (space, effort, and relationship)

Difficulties to watch for¹ If... Then... Child is not actually getting off the ground Provide flat obstacles for the child to try to hop over (rope or line) Have the child verbalize the parts of the hop out loud (bent knees, push-off, arm swing, landing) Hopping appears very uncoordinated and awkward Child is unable to alternate hopping foot Encourage the child to practice hopping on each foot separately Child is using insufficient arm swing Encourage the child to stand in a stationary position and swing arms to imitate a hopping motion

- PHE Canada (2011). Fundamental movement skills: An educator's guide to teaching fundamental movement skills.
- Ulrich, D. (2000). Test of Gross Motor Development, 2nd ed. (TGMD-2) Assessment protocol

- **References Continued:**
- 4. Baumgarten, S. & Langton, T. (2006). Elementary Physical Education: Building a Solid Movement Foundation. Stipes Publishing L.L.C.: Champaign, IL.
- Gallahue, D., Ozmun, J., & Goodway, J. (2007). Understanding motor development: Infant, children, adolescents, adults (7th ed.). McGraw Hill: New York, NY. 5. Poster created by Drs. Helena Baert & Matthew Madden, SUNY Cortland, 2016

Locomotor: Skipping

Performance Indicators/Teaching cues¹

- Displays a step-hop pattern "step-hop"
- Uses both sides of body alternately "left then right"
- Swings arms in opposition to feet "arm swing"
- Displays a rhythmical pattern "keep a beat"
- Focuses eye forward "look ahead"

Instructional Video QR ⁵

Literacy												
skip	balance	rhythm										
step	hop	forward										
slow	medium	fast										

Stages of Motor Development³



Stage 1

Initial Stage

Broken Skip Broken skip pattern or irregular rhythm Slow, deliberate movement Ineffective arm action



Stage 2

Elementary Stage

High Arms & Legs Rhythmical skip pattern Arms provide body lift Excessive vertical component



Stage 3

Mature Stage

Rhythmical Skip Arm action reduced/hands below shoulders Easy, rhythmical movement Support foot near surface on hop

Pre or Post Assessment

The of host Assessment																				
Directions²: Have the child skip from one cone to another for about 25 feet	Students (example n=20)																			
Performance Indicators ¹	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Displays a step-hop pattern																				
Uses both sides of body alternately																				
Swings arms in opposition to feet with rhythm																				
Focuses eyes forward																				
Total # of Performance indicators met																				
Developmentally Appropriate Progressions ^{3,4} I: Initial / Emerging: Limited indicators visible in any context E: Elementary / Able: Some indicators in closed contexts M: Mature / Competent: All indicators in closed contexts																				

Developmentally Appropriate Progressions

Initial Stage / Emerging

Note: Make sure students are able to balance and hop continuously prior to teaching step-hop

- Practice step-hop in self space "step forward and hop on the same foot"
- 2. Step and lift the knee sharply (fast, strong) upward working on creating a rhythm
- March with high knees in self space
- 4. Practice lifting your leg and arm then walking and repeating this pattern
- 5. Swing your arm and leg upward on the same side, and then swing your arm and leg upward on the other side
- 6. Step-hop pattern slowly with preferred side
- Step-hop pattern with non-preferred side
- 8. Step-hop pattern slowly alternating
- 9. Step-hop pattern on a mat indicating feet position throughout the process
- 10. Skip in self-space

Elementary Stage / Able

- 11. Skip in different pathways and directions – straight, zigzag, or curved
- 12. Skipping while changing directions, pathways, and levels
- 13. Skip while changing speeds (slow, medium, fast)
- 14. Skip while the teacher claps / drums to a rhythm
- 15. Skip while changing speeds to music
- 16. Skipping to the music while changing directions, pathways, and levels
- 17. Skip landing strong or light
- 18. Skip at different levels low, middle, or high
- 19. Skip for distance (force)
- 20. Skip swinging arms at low, middle and high levels
- 21. Skip while alternating strong and light landing

Mature Stage / Competent

Space consideration: Students must practice being aware of their environment by keeping eyes up for safety

- 22. Practice self-space while skipping in open space with multiple students
- 23. Skip following a partner
- 24. Skip along side of a partner
- 25. Skip mirroring a partner in place
- 26. Skip while shadowing each others movement (one partner in front and other behind)
- 27. Skip while shadowing your partner and changing directions, pathways, levels, and speeds
- 28. Skip while matching a partner (student standing next to each other)
- 29. Skip while chasing, fleeing, dodging with a partner
- 30. Skip while playing "tag games" (chasing, fleeing, dodging)
- 31. The combination of multiple locomotor skills (including skipping) to create routines

Difficulties to watch for¹ If... Then... There is an inconsistent step-hop pattern Use colored tape to mark footsteps on the floor and help establish pattern There is a lack of rhythm in the skip Clap the rhythm for children Encourage the children to life their feet just off the ground Movements are exaggerated Slight loss of balance from time to time Have the child slow the skip down and exaggerate the hop portion of the skip Children are landing flat footed Ask children to see if they can make their skip as "quiet" as possible

References:

- PHE Canada (2011). Fundamental movement skills: An educator's guide to teaching fundamental movement skills.
- Ulrich, D. (2000). Test of Gross Motor Development, 2nd ed. (TGMD-2) Assessment protocol
- Gallahue, D., Ozmun, J., & Goodway, J. (2007). Understanding motor development: Infant, children, adolescents, adults (7th ed.). McGraw Hill: New York, NY. 5. Poster created by Drs. Helena Baert & Matthew Madden, SUNY Cortland, 2016

- 4. Baumgarten, S. & Langton, T. (2006). Elementary Physical Education: Building a Solid Movement Foundation. Stipes Publishing L.L.C.: Champaign, IL.

Manipulative: Underhand Rolling

Stages of Motor Development³

Performance Indicators/Teaching cues¹

- Focus eyes on target- "eyes on target"
- Roll ball with backward and forward arm swing "swing"
- Step forward with leg opposite to the hand holding the ball "opposite"
- Bends knees and releases the ball along floor "bend & release low"
- Follows through with hand pointing at target "follow through"

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11.00 (new display	
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Instructional Video QR⁵

Literacy											
roll	low	bend									
swing	between	under									
opposite	aim	target									

Stage 1

Initial Stage

Straddle Stance

Ball is held with hands on side, palms facing each other, acute bend at sides, backwards pendulum motion, eyes monitor the ball, forward swing and trunk lift to release ball



Stage 2

Elementary Stage

Stride stance

Ball held with one hand on bottom and the other on top, backward arm swing without weight transfer, limited knee bend, forward swing with limited followthrough, ball released between knee and waist level, eyes alternate monitoring target and ball



Stage 3

Mature Stage

Contralateral Step

Ball held in hand corresponding to trailing leg Slight hip rotation and trunk lean forward Pronounced knee bend, forward swing with weight transfer from back to front foot, release at knee level or below, eyes on target throughout

Pre or Post Assessment

Directions². Tennic hall, age 3-6 softhall, age 7-10 Roll from 20 ft

away between 2 cones 4 ft apart	Students (example n=20)																			
Performance Indicators ¹	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Focus eyes on target																				
Roll ball with backward and forward arm swing																				
Step forward with leg opposite to the hand holding the ball																				
Bends knees and releases the ball along floor																				
Follows through with hand pointing at target																				
Total # of Performance indicators met																				
Developmentally Appropriate Progressions ^{3,4} I: Initial / Emerging: Limited indicators visible in any context E: Elementary / Able: Some indicators in closed contexts M: Mature / Competent: All indicators in closed and closed contexts																				

Developmentally Appropriate Progressions

Initial Stage / Emerging

1. Sitting roll with two hands to teacher/target (low,

- near)
- 2. Sitting roll with two hands at a greater distance to teacher/target (low, far)
- 3. Sitting roll using two hands with a partner (low, straight, relationship)
- 4. Sitting roll using two hands with a small group (low, directions, relationship)
- (opposition, medium level, swing) Kneeling roll to teacher/target with 1 hand

5. Kneeling roll without ball to teacher/target

- (opposition, medium level, swing) 7. Kneeling roll to target with 1 hand using strong
- force 8. Kneeling roll to target with 1 hand using light force
- Kneeling roll to target with 1 hand at different
- distances (far, near) varying force
- 10. Kneeling roll with 1 hand between two cones varying the width of the cones
- 11. Kneeling roll with 1 hand under a rope suspended by two cones (vary heights: high, medium, low)
- 12. Kneeling roll with 1 hand under a rope suspended by two cones (vary heights: high, medium, low and force: light, strong)

Elementary Stage / Able

- 13. Standing roll with 1 hand under a rope suspended by two cones at a low level
- 14. Put student in stride stance (Busy hand, busy foot: busy hand holds the ball, busy foot is opposite to busy hand) (opposition)
- 15. Have students demonstrate busy hand, busy foot from different positions (in front, behind, on line) (opposition)
- 16. Stride stance without ball, bend knees (lunge) to create different levels (low, medium, high)
- 17. Stride stance without ball, bend knees (lunge) to create a low level and swing arm back and forth (transfer weight)
- 18. Stride stance with ball, bend knees (lunge) to create a low level and swing arm back and forth (transfer weight)
- 19. Stride stance roll with 1 hand under a rope suspended by two cones at a low level (transfer weight, low, swing)
- ***Use a rope suspended by two cones as needed to reinforce getting low***
- 20. Stride stance roll with 1 hand using different forces (light, strong, swing)
- 21. Stride stance roll with 1 hand at a target varying the width of the target (large, medium, small, follow through)

Mature Stage / Competent

- 22. Introduce the contralateral step: stand behind the line, step over the line with busy foot while holding ball in busy hand
- 23. Have students demonstrate stepping with busy hand, busy foot from different positions (in front, behind, on line) (opposition)
- 24. Step in opposition with ball, bend knees (lunge) to create a low level and swing arm back and forth (transfer weight)
- 25. Step in opposition and roll with 1 hand at a low level (transfer weight, low, swing)
- 26. Step in opposition and roll with 1 hand using different forces (light, strong, swing)
- 27. Step in opposition and roll with 1 hand at a target varying the width of the target (large, medium, small, follow through)
- 28. Repeat tasks 24-27 and increase size of ball
- 29. Repeat tasks 24-27 and increase size and weight of ball
- ** at this time, students would roll with the appropriate size/weight ball for their level **
- 30. Have student roll with 1 hand at multiple targets (cones, bowling pins), varying distances (near, far), and varying force (light, strong)

Difficulties to watch for¹

If	Then
They fail to control the ball in the hand	Use smaller balls
They fail to look at the target	Put a marker down for students to aim at. Go through swinging motion without a ball while partner shows number cards.
They release the ball and it always veers to one side	Mark down a line for students to aim at and follow as they are following through. Have students point at the target and pause there
They do not step in opposition	Put feet markers down and draw a line for students to step over.

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Manipulative: Underhand Throw

Performance Indicators/Teaching cues¹

- Focuses eyes on target "eyes on target"
- Steps forward with foot opposite to throwing arm "step forward"
- Throwing arm swing down and and then forward "swing tick/tock"
- Shifts weight from back to front foot "back to front"
- Hand follows through after ball release at waist level "point at target"
- Open hand to release ball at waist "Open up"



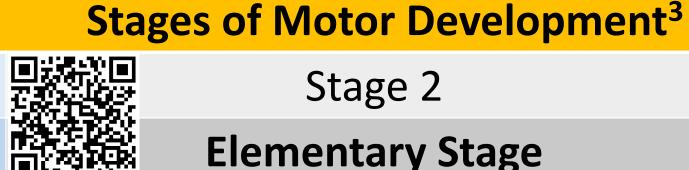
	Literacy												
throw	far	target											
toss	over	point											
near	under	in											
out	tick	tock											

Stage 1

Initial Stage

Stationary

Ball is held with hands on side, palms facing each other, limited swing backward, eyes monitor the ball, forward swing and trunk lift to release ball



Stage 2

Elementary Stage

Ipsilateral Step or Stride stance Ball held with one hand, backward arm swing without weight transfer to the rear, forward swing with limited follow-through, ball released between knee and waist level or above chest level, eyes alternate monitoring target and ball



Stage 3

Mature Stage

Contralateral Step

Ball held in hand corresponding to trailing leg, step forward with opposite foot, forward swing with weight transfer fro back to front foot, release at waist level, follow through, eyes on target

Pre or Post Assessment

Directions²: 15 feet from wall, child throws tennis ball

underhand at the wall								Stud	dent	s (ex	amp	le n=	20)							
Performance Indicators ¹	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Focuses eyes on target																				
Steps forward with foot opposite to throwing arm																				
Throwing arm swing down and and then forward																				
Shifts weight from back to front foot																				
Hand follows through after ball release at waist level																				
Open hand to release ball at waist																				
Total # of Performance indicators met																				
Developmentally Appropriate Progressions ^{3,4} I: Initial / Emerging: Limited indicators visible in any context E: Elementary / Able: Some indicators in closed contexts M: Mature / Competent: All indicators in closed contexts																				

Developmentally Appropriate Progressions

Initial Stage / Emerging

- Practice rolling to a partner or target
- Practice sliding a bean bag on the ground with one hand – play tag game
- Kneeling and underhand throw without a ball to teacher/target (opposition, medium level, swing)
- Kneeling and underhand throw with small or light weight ball to a teacher/target (opposition, medium level, swing)
- Kneeling, underhand throw to target with 1 hand using strong force
- 6. Same as #5 using light force
- Kneeling, underhand throw to target with 1 hand at different distances (far, near) varying force
- Kneeling, underhand throw, using bean bags of small balls to throw in large boxes drawn on ground/hula hoops on ground
- 9. Same as #8 but varying distances
- 10. Kneeling, underhand throw, using bean bags or small balls to throw in small boxes/hula hoops
- 11. Same as #10 but varying distances

Elementary Stage / Able

- 12. Put student in stride stance (Busy hand, busy foot: 22. Introduce the contralateral step: stand behind busy hand holds the ball, busy foot is opposite to busy hand) (opposition)
- 13. Have students demonstrate busy hand, busy foot from different positions (in front, behind, on line) (opposition)
- 14. Stride stance without ball, bend knees slightly and swing arm back and forth (transfer weight)
- 15. Stride stance with ball, bend knees slightly and swing arm back and forth (transfer weight)
- 16. Stride stance underhand throw over a rope suspended by two cones at a low level (transfer weight, low, swing)
- 17. Stride stance, underhand throw to target with 1 hand at different distances (far, near) varying force
- 18. Stride stance, underhand throw, using bean bags of small balls to throw in large boxes drawn on ground/hula hoops on ground
- 19. Same as #8 but varying distances
- 20. Stride stance, underhand throw, using bean bags or small balls to throw in small boxes/hula hoops
- 21. Same as #10 but varying distances

Mature Stage / Competent

- the line, step over the line with busy foot while holding ball in busy hand
- 23. Have students demonstrate stepping with busy hand, busy foot from different positions (in front, behind, on line) (opposition)
- 24. Step in opposition with ball and swing arm back and forth (transfer weight, tick/tock)
- 25. Step in opposition and underhand throw to large targets on ground (transfer weight, low, swing)
- 26. Step in opposition and underhand throw to large targets at different distances (far, near) varying forces
- 27. Step in opposition and underhand throw to different sized targets on ground (transfer weight, low, swing)
- 28. Step in opposition and underhand throw to small targets
- 29. Step in opposition and underhand throw to different sized targets from different distances (far, near) varying forces
- *** Tossing & catching with partner would occur only when students are comfortable with catching the ball (see catching poster) ***

Difficulties to watch for¹ If... Then... Use smaller balls They fail to control the ball in the hand They take object upwards in preparation to throw They should make a downward circle and take object behind the trunk Children are not keeping eyes on target Partner hold flashcards with numbers or letters as thrower goes through action without throwing Small step in opposition Place skipping rope a bit further and coach them to step bigger They release the ball and it always veers to one side Mark down a target for students to aim at and have students point at the target and pause there

- References: PHE Canada (2011). Fundamental movement skills: An educator's guide to teaching fundamental movement skills.
- Ulrich, D. (2000). Test of Gross Motor Development, 2nd ed. (TGMD-2) Assessment protocol

From J. Barrett & C. Scaini, 2019, Physical and health education in Canada (Champaign, IL: Human Kinetics).

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- 4. Baumgarten, S. & Langton, T. (2006). *Elementary Physical Education: Building a Solid* Movement Foundation. Stipes Publishing L.L.C.: Champaign, IL.

Manipulative: Catching

Performance Indicators/Teaching cues¹

- Focus eyes on object throughout catch "Look"
- Positions body in the path of the object (midline catch) "get behind"
- Positions one foot slightly ahead of the other in balanced position "ready"
- Catching object with hands "pinkies together thumbs together"
- Relaxes and absorbs the force of the object "soft hands"





	Literacy	
catch	soft	midline
low	medium	high
pinkies	thumbs	look

Stages of Motor Development³

Stage 1 Stage 2 Stage 3 Stage 4 Stage 5 **Initial Stage Elementary Stages Mature Stage Delayed Reaction** Hand catch Move to ball Hugging Scooping Delayed arm action Arms encircle ball as it "to chest" catch Catch with hands only Catch with hands only Arms straight in front until Arms "scoop" under ball to trap Whole body moves through the Feet stationary or limited to approaches ball contact, then scooping Ball is "hugged" to chest it to chest. Single step may be one step space used to approach the ball action to chest Feet are stationary or may Feet stationary take one step

Pre or Post Assessment

Directions²: 4' ball, 2 lines 15ft apart. Toss ball lightly/ underhand

to child aiming at chest.		Students (example n=20)																		
$X \leftarrow X$																				
Performance Indicators ¹	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Focus eyes on object throughout catch																				
Positions body in the path of the object (midline catch)																				
Positions one foot slightly ahead of the other in balanced position																				
Catches object with hands																				
Relaxes and absorbs the force of the object																				
Total # of Performance indicators met																				
Developmentally Appropriate Progressions ^{3,4} I: Initial / Emerging: Limited indicators visible in any context E: Elementary / Able: Some indicators in closed contexts M: Mature / Competent: All indicators in closed contexts																				

Developmentally Appropriate Progressions Initial Stage / Emerging Elementary Stage / Able Mature Stage 14. Toss, track and catch a balloon (with hands only) 1. Catch a rolled ball with the body (trapping) Catch a rolled ball with their hands 15. Toss & catch balloon at different levels (medium, high, low) hands ball and catching it. Seated roll with a partner 4 feet away 16. Toss & catch a large lightweight ball at the different levels (hands) 29. With partner, move & catch a Seated roll with a partner 8 feet away tennis size ball. 17. Toss & catch a lightweight ball (balloon, beach ball) using turning Catch a two-handed light bounce from a and twisting, stationary feet 30. With partner, move & catch a teacher (or partner when ready) seated 4

- Pushing and catching a tethered ball (body)
- Pushing and catching a tethered ball (hands)

feet away (encourage scooping)

- 8. Toss, track and catch a balloon with body
- 9. Toss & catch balloon at a medium level with body
- 10. Toss & catch balloon at a high level with body
- 12. Catch a large lightweight ball (beach ball) with body
- 13. Toss & catch a large lightweight ball at the different levels (medium, high, low) body

- 18. Use a medium size ball and toss it to self at different levels (seated, medium, standing)
- 19. Use bean bags and toss it to self at different levels (seated, medium, standing)
- 20. Use small ball and toss it to self at different levels (seated, medium, standing)
- 21. Toss & catch a small ball while crossing the midline (twisting)
- 22. Catch a ball after a bounce
- 23. Throw & catch with a partner close by
- 11. Toss & catch balloon at a low level with body 24. Underhand toss with a partner from 2 feet away, choice in ball (larger/lighter ball is easier)
 - 25. Underhand toss with a partner, student receiving ball takes 1 step towards ball to catch
 - 26. Underhand toss with a partner (increase distance)
 - 27. Underhand toss with partner, changing distance, levels, directions (stationary)

- 28. With partner, moving to a large
- tennis size ball at different levels
- 31. With partner, move & catch a tennis size ball off a bounce
- 32. With partner, move & catch a tennis size ball from different distances
- 33. Catching a rebounded ball off the ball
- 34. With partner, move & catch a ball from different speeds
- 35. With a partner, toss & catch while changing levels, distances, speeds, objects
- 36. With a partner, catch with different objects (e.g. scoops, gloves, nets, buckets)

Difficulties to watch for ¹										
If	Then									
Eyes not on object	Mark the ball with an X and ask to look at X. Use two colored balls catch the correct color									
Can't catch ball thrown by partner	Catch ball that is rolled first. Have child drop ball and catch it									
Trouble catching ball thrown by partner	Let the ball bounce before catching it									
Cradling ball against chest	Select larger, lighter balls. Have child reach for ball to catch it without touching his/her chest									
Catcher must move to catch and is unsuccessful	Thrower should toss underhand in catcher's zone so that partner doesn't need to move. Encourage midline catching									
Trouble catching small objects	Increase size of object – difficult to throw but easier to catch									

- PHE Canada (2011). Fundamental movement skills: An educator's guide to teaching fundamental movement skills.
- Ulrich, D. (2000). Test of Gross Motor Development, 2nd ed. (TGMD-2) Assessment protocol

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- 4. Baumgarten, S. & Langton, T. (2006). *Elementary Physical Education: Building a Solid* Movement Foundation. Stipes Publishing L.L.C.: Champaign, IL.

Manipulative: Overhand Throw

Performance Indicators/Teaching cues¹

- Focuses eyes on target "eyes on target"
- Bends and hold elbow back at shoulder height behind ear "T"
- Rotates hips so that opposite shoulder is in line with the target "side to target"
- Steps forward with foot opposite to throwing arm "step forward"
- Shifts weight from back to front foot "back to front"
- Leads throw with elbow, follows through down and across "follow through"

Instructional Video QR⁵



Literacy												
eyes	Т	opposite										
side	target	step										
front	back	point										

Stages of Motor	Development ³
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Elementary Stages

Stage 1 **Initial Stage**

"Chop" throw

Feet stationary

No spinal rotation

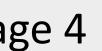








Stage 4



Stage 5

Mature Stage

Chop Vertical windup

Sling shot Horizontal wind-up "sling shot throw" **Block rotation** Follow-through across body

Ipsilateral step High windup Feet cross over Little spinal rotation Follow-through across body

Contralateral step High windup Contralateral step Little spinal rotation Follow-through across body

Windup Downward arc windup Contralateral step Segmented body rotation Arm-leg follow-through

Pre or Post Assessment

Directions²: 20 feet from wall, child throws tennis ball hard at the wall

Students (example n=20)

Performance Indicators¹

11 12 13 14 15 16 17 18 19

Focuses eyes on target Bends and holds elbow back at shoulder height behind ear Rotates hips so that opposite shoulder is in line with the target Steps forward with foot opposite to throwing arm Shifts weight from back to front foot Leads throw with elbow, follows through down and across **Total # of Performance indicators met**

Developmentally Appropriate Progressions^{3,4}

I: Initial / Emerging: Limited indicators visible in any context E: Elementary / Able: Some indicators in closed contexts M: Mature / Competent: All indicators in closed contexts

Developmentally Appropriate Progressions

Initial Stage / Emerging

Kneeling and overhand throw without a ball to teacher/target (opposition, medium level, swing)

- Kneeling and overhand throw with small or light weight ball to a teacher/target (opposition, medium level, swing)
- Kneeling, overhand throw to target with 1 hand using strong force
- Kneeling, overhand throw to target with 1 hand using light force
- Kneeling, overhand throw to target with 1 hand at different distances (far, near) varying force
- 6. Kneeling, overhand throw, using light objects to throw to large targets on wall or suspended
- 7. Same as #6 but varying distances
- Kneeling, overhand throw, using light objects objects to throw to small targets on wall or suspended
- 9. Same as #8 but varying distances

Elementary Stage / Able

*Place foot markers on floor to indicate opposition, the following progressions are all from a standing position

- 10. Overhand throw without a ball to teacher/target (opposition, medium level, swing)
- 11. Overhand throw with small ball to a teacher/target (opposition, medium level, swing)
- 12. Overhand throw to target with 1 hand using strong force
- 13. Overhand throw to target with 1 hand using light force
- 14. Overhand throw to target with 1 hand at different distances (far, near) varying force
- 15. Overhand throw, using light objects to throw to large targets on wall or suspended
- 16. Same as #15 but varying distances
- 17. Overhand throw, using light objects objects to throw to small targets on wall or suspended
- 18. Same as #17 but varying distances
- ** Remove foot markers and introduce step in opposition and rotate torso
- 19. Overhand throw with step in opposition to targets varying distance to the target and size of target

Mature Stage / Competent

**When throwing to partners, mature catching patterns are pre-requisite skills

- 20. Throw to a stationary partner varying distances
- 21. Throw to a stationary partner for accuracy (limit steps taken by catcher)
- 22. Throw to a partner who is moving laterally
- 23. Throw to a partner who is moving towards you
- 24. Throw to a partner who is moving away from
- 25. Throw to a partner standing stationary while you (person throwing) moves laterally
- 26. Throw to a partner standing stationary while you (person throwing) move towards target
- 27. Throw to a partner standing stationary while you (person throwing) move away from target (throw while walking backward)
- 28. Throw while you and a partner are moving the same way (laterally, towards and away from each other)
- 29. Throw while moving in opposite directions
- 30. Combine different manipulative skills (throwing & catching) in small sided games

Difficulties to watch for¹ If... Then... They should straddle a line so that the shoulder opposite the throwing hand faces the target Children are not standing sideways to target They should make a downward circle and take object behind the head They take object upwards in preparation to throw Partner hold flashcards with numbers or letters as thrower goes through action without throwing Children are not keeping eyes on target Partner can hold the object to be thrown behind the thrower so that the thrower has to reach behind There is no opposition Small step in opposition Place skipping rope a bit further and coach them to step bigger Rotate trunk and hips in block formation Lead them into how to isolate the hip first, next rotate shoulders Ending throw with throwing hand pointing Throw the object and touch outside of knee opposite the throwing arm

References:

- PHE Canada (2011). Fundamental movement skills: An educator's guide to teaching fundamental movement skills.
- Ulrich, D. (2000). Test of Gross Motor Development, 2nd ed. (TGMD-2) Assessment protocol

- 4. Baumgarten, S. & Langton, T. (2006). Elementary Physical Education: Building a Solid Movement Foundation. Stipes Publishing L.L.C.: Champaign, IL.
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Manipulative: Kicking

Performance Indicators/Teaching cues¹

- Focuses eyes on target "Eyes on target"
- Steps beside the ball with non-kicking foot "Plant foot"
- Bends body at waist, initiates kick from hip "Lean in"
- Bends kicking leg (knee over ball) to contact with shoelaces "shoelaces"
- Swings arms in opposition to kicking foot "swing"
- Follows through with kicking leg pointing to target "swing through"



	Literacy											
kick	inside	tap										
soft	low	foot										
soccer	hard	high										
swing	plant	target										

Stages of Motor Development³



Stage 1

Initial Stage

Stationary Push Little/no leg windup / Stationary position / Foot "pushes" ball / Step backward after kick



Stage 2

Stage 3

Elementary Stages

Stationary Leg swing Leg windup to the rear Stationary position Opposition of arms and legs

Moving approach Foot travels in a low arc Arm/leg opposition Forward or sideward step on followthrough

Stage 4



Leap-kick-hop

Rapid approach Backward trunk lean during windup Leap before kick / Hop after kick

Pre	e or	. Po	St A	ASSE	essi	mer	ητ													
Directions ² : Run and kick a stationary ball for 20 feet to a wall		Students (example n=20)																		
Performance Indicators ¹	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Focuses eyes on target																				
Steps beside the ball with non-kicking foot																				
Bends body at waist, initiates kick from hip																				
Bends kicking leg (knee over ball) to contact with shoelaces																				
Swings arms in opposition to kicking foot																				
Follows through with kicking leg pointing to target																				
Total # of Performance indicators met																				
Developmentally Appropriate Progressions ^{3,4}																				
I: Initial / Emerging: Limited indicators visible in any context																				
E: Elementary / Able: Some indicators in closed contexts																				
M: Mature / Competent: All indicators in closed contexts																				

Developmentally Appropriate Progressions

Initial Stage / Emerging

- 1. Check ability to balance and walkcomplete those progressions if needed
- motion
- Hold onto wall and do a big leg swing with no knee bend

Note: An "Easy ball" is a tethered ball suspended at different heights

- 4. Hold onto wall/chair and kick an "easy ball" or stationary ball
- 5. Stand and kick an "easy ball" or stationary ball
- 6. Stand and kick an "easy ball" or stationary ball softly
- 7. Stand and kick an "easy ball" or stationary ball as hard as you can
- 8. Use a sticker to mark where the nonkicking foot should go and have them kick the stationary ball with their other foot
- Have student lean slightly forward while kicking a stationary ball
- 10. Have student step forward after they kick with their kicking foot.

Elementary Stage / Able

Introduce stepping to the side of the ball with the nonkicking foot "plant foot"

- 2. Hold onto wall and do a continuous kicking 11. Kick stationary ball to the wall (hint: to prevent ball rolling, place ball on bean bag)
 - 12. Kick stationary ball at wall as hard as you can (force)
 - 13. Kick a stationary ball lightly (force) to a partner
 - 14. Kick a stationary ball to a target varying distance from target
 - 15. Kick a stationary ball to a target varying angles to target
 - 16. Kick a stationary ball to a target varying parts of the foot
 - 17. Kick a stationary ball to a target varying directions to the target
 - 18. Kick a stationary ball with different levels (low, medium, high)
 - 19. Kick a stationary ball, using a backswing and follow through to partner who will trap the ball
 - 20. Run and kick a stationary ball at the wall
 - 21. Repeat #12-18 with a running approach
 - 22. In the approach, encourage an extended step (leap) before planting foot and then kick (with no ball) to increase force
 - 23. Have student approach with leap and then kick with a stationary ball

Mature Stage / Competent

- 24. Run and kick a slow moving ball
- 25. Run and kick a slow moving ball as far as you can
- 26. Run and kick a slow moving ball at a large target and then a small target
- 27. Run and kick a slow moving ball to a partner while walking (passing)
- 28. Run and kick the ball so it stays on the ground
- 29. Run and kick the ball high to a partner
- 30. Kick while you and a partner are moving the same way (laterally, towards and away from each other)
- 31. Kick while moving in opposite directions
- 32. Dribble (light taps) slowly and then kick the ball at a large target and then a small one
- 33. Dribble quickly and then kick the ball at target (vary size of target)
- 34. Play a small sided game that includes running, kicking and dribbling.
- 35. When ready, complete #24-33 using nonpreferred foot

Difficulties to watch for ¹										
If	Then									
There is limited back swing	Without using ball, practice full-range leg swing with kicking leg									
Non-kicking foot is not planted next to ball	Place a mark where child should place their foot									
Instep of foot does not contact ball below center	Make a mark on the ball to show the point of contact									
Kicking foot does not follow through	Without ball, coach the child to swing through with kicking leg to touch fingers of outstretch opposite arm									

- PHE Canada (2011). Fundamental movement skills: An educator's guide to teaching fundamental movement skills.
- Ulrich, D. (2000). Test of Gross Motor Development, 2nd ed. (TGMD-2) Assessment protocol Gallahue, D., Ozmun, J., & Goodway, J. (2007). Understanding motor development: Infant, children, adolescents, adults (7th ed.). McGraw Hill: New York, NY. 5. Poster created by Drs. Helena Baert & Matthew Madden, SUNY Cortland, 2016
- **References Continued:**
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Manipulative: 2-Handed Striking

Performance Indicators/Teaching cues¹

- Eyes focused on object being struck "Watch ball"
- Stands side on to target— "Stand Sideways"
- Displays preparatory backswing- "Swing back"
- Hip and shoulder rotation during swing "Rotate"
- Transfers weight from back to front foot "Back to Front"
- Follows through along swinging path "Follow Through"



strike	light	hard
hit	turn	rotate
swing	front	back

Stages of Motor Development³

Stage 1 nitial Stage

Chop Strike "Chop" Strike-bat / Feet Stationary Trunk faces tossed ball / No trunk rotation / Elbows fully flexed Force comes from extension of flexed joints in a downward plane



Stage 2

Pushing

Weight shift to front foot before

striking / Combined trunk and hip

Horizontal push/swing

Feet stationary/stepping

rotation (block rotation)



Elementary Stages Ipsilateral Step Back foot steps across

Diagonal downward swing Strike in oblique plane

Stage 4 **Mature Stage**

Contralateral Step

Contralateral step / Segmented body rotation / Wrist rollover on follow-through / Weight shifts to back foot / Weight shift occurs while object is still moving backwards / Striking in a long, full arc in horizontal plane / Weight shifts to front foot on contact

Pre or Post Assessment																				
Directions²: Hit 4' ball off batting tee. Tell child to hit hard				Students (example n=20)																
Performance Indicators ¹	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Eyes focused on object being struck																				
Stands side on to target																				
Displays preparatory backswing																				
Hip and shoulder rotation during swing																				
Transfers weight from back to front foot																				
Follows through along swinging path																				
Total # of Performance indicators met																				
Developmentally Appropriate Progressions ^{3,4}																				
I: Initial / Emerging: Limited indicators visible in any context																				
E: Elementary / Able: Some indicators in closed contexts																				
M: Mature / Competent: All indicators in closed contexts																				

Developmentally Appropriate Progressions

Initial Stage / Emerging

- Strike light object upward with different body parts
- Strike light object forward with different body parts
- Strike balloon up in the air with hand
- Strike "easy ball" (tethered ball) with hand forward
- Strike easy ball with a light paddle
- 6. Strike balloon with a light paddle varying force, levels, and directions
- 7. Strike balloon forward towards a wall with hand (teacher assisted)
- 8. Show students how to hold balloon and stand to the 18. Strike off tee to different targets placed side to side to strike to the wall
 - ***use stickers for foot placement to show perpendicular stance "sideways"
- 9. Hit "easy ball" coming toward you with hand
- 10. With a pool noodle, strike the easy ball

Elementary Stage / Able

Reminder: use markers to indicate sideways foot placement to the tee

- 11. Strike stationary easy ball with large foam bat
- 12. Strike ball off tee as hard as possible
- 13. Stickers on the floor for body position
- 14. Strike ball off tee as hard as possible
- 15. Add additional sticker for front foot step
- 16. Add noodles to the tee for level swing path
- 17. Strike off tee to different size targets
- side so students must change their body position
- 19. Strike softly tossed large ball from a mature thrower about swinging at a horizontal plane
- 20. Same as #19 but decrease the size of the ball

Mature Stage / Competent

- 21. Strike tossed ball from mature thrower varying the speed of the ball
- 22. Strike tossed ball as hard as possible for distance
- 23. Strike tossed ball under more control to different locations
- 24. Strike tossed ball and run to a cone
- 25. Redo #22 and 23 using varying the speed of the throw
- 26. Combine striking, fielding, running, throwing and catching in small sided games

Difficulties to watch for¹ If... Then... Ask them to watch an X marked on ball, use bright colored ball They do not watch the incoming object They should stand in ready position facing the object, then turn sideways with arms apart They are not opening up when preparing to strike Place ball on large cone or tee; children practice hitting ball off tee – make sure they open up They strike the object outside the hitting zone Practice opening up with weight on back foot and striking motion when shifting to front foot. They are not transferring weight Without bat or ball, have students say back / front They have trouble striking ball in air Allow a bounce before you strike They have trouble striking small objects Practice with balloons, then progress to smaller balls Allow practice with paddle bat; start with popping object up and letting it bounce between strikes They are having an easy time striking with hands

- PHE Canada (2011). Fundamental movement skills: An educator's guide to teaching fundamental movement skills.
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- **References Continued:**
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Manipulative: Dribbling

Performance Indicators/Teaching cues¹

- Eyes focused forward "look ahead"
- Initiates ball contact with fingertips— "5 fingers"
- Bends and straightens wrist and elbow to push the ball- "yo-yo"
- Hips and knees flexed slightly during dribbling "bend and lean slightly"
- Dribble in front and to the side of the body— "opposite foot forward"
- Performs a rhythmical series of controlled dribbles— "wave to the ball"



	Literacy	
dribble	bounce	fingers
eyes	ball	уо-уо
slow	fast	wave
high	low	ready

Stages of Motor Development³

Stage 1

Initial Stage

Palms facing Ball held with both hands Hands placed on side of ball, palms facing each other / Downward trust with both arms / Ball contacts surface close to body, may contact foot / Great variation in height of bounce / Repeated ball catch pattern



Stage 2

Stage 3

Elementary Stages

Flat bounce Ball held with both hands, one on top, one near bottom Slight forward lean

Downward trust, force inconsistent Watches ball

Palm hits ball Limited control of ball

Flex wrist Wrist flexes and extends Ready position, more steady More consistent dribbles



Stage 4 **Mature Stage**



Controlled dribble

Feet in narrow stance, opposite foot forward

Slight forward trunk lean Ball waist high Ball pushed, fingers used

Visual monitoring unnecessary Controlled dribbling

Pre or Post Assessment																				
Directions²: Playground ball for 3-5 year olds, basketball for 6-10. Dribble ball 4x without moving, repeat on other side	Students (example n=20)																			
Performance Indicators ¹	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Focuses eyes forward																				
Initiates ball contact with fingertips																				
Bends and straightens wrist and elbow to push the ball																				
Hips and knees flexed slightly during dribbling																				
Dribble in front and to the side of the body																				
Performs a rhythmical series of controlled dribbles																				
Total # of Performance indicators met																				
Developmentally Appropriate Progressions ^{3,4}																				
I: Initial / Emerging: Limited indicators visible in any context																				
E: Elementary / Able: Some indicators in closed contexts																				
M: Mature / Competent: All indicators in closed contexts																				

Developmentally Appropriate Progressions

Initial Stage / Emerging

- Bounce and catch a ball with 2 hands
- Bounce the ball 2 times and catch with 2 hands
- Bounce a ball with 2 hands and catch with 2 while sitting
- Bounce a balloon hung by a stocking with two, one hand, fast, slow, light, and alternating hands and speed
- 5. "Mummywrap" students move the ball around their body going from feet to neck as if they were wrapping up a mummy
- 6. Dribble a ball allowing as much time as you can between bounces
- 7. Dribble a ball as many times as you can until it stops
- Dribble a ball without catching it
- Dribble a ball in a hula hoop (big to small)
- 10. Dribble a ball on one poly spot while catching it
- 11. Dribble a ball two times without catching the ball

Elementary Stage / Able

- 12. Dribble a ball consecutive while staying in self-space
- 13. Dribble the ball with your opposite foot forward across a line
- 14. Dribble the ball at knee level with opposite foot forward
- 15. Dribble the ball at waist level with opposite foot forward
- 16. Dribble the ball at shoulder height with opposite foot forward
- 17. Dribble the ball while flexing the wrist like a yo-yo encouraging a medium size dribble
- 18. Dribble the ball on one side of your body
- 19. Dribble the ball on the other side of your body
- 20. Dribble a ball while looking up at the teacher
- 21. Dribble the ball while walking forward
- 22. Dribble the ball while walking backwards
- 23. Dribble the ball alternating between walking forwards and backwards
- 24. While travelling, dribble the ball continuously at different levels alternating between high, middle, and low

Mature Stage / Competent

- 25. Dribble the ball in different pathways (straight, curved, zig zag) focusing on controlled dribbling with eyes forward
- 26. Dribble the lines of the basketball court
- 27. Dribble the ball from side to side using just your preferred hand
- 28. Dribble the ball from side to side using your non-preferred hand
- 29. Dribble the ball to the right and the left
- 30. Dribble the ball while sliding to the right and the left
- 31. Dribble the ball at a faster pace going forward to backward and right and left
- 32. "Globetrotters" Students will show off different tricks dribbling around their body, behind your back, between their legs, with music
- 33. Combining different skills like dribbling, throwing, catching, running in small sided games

Difficulties to watch for¹ If... Then... They use slapping motion Ask the child to imitate waving good-bye to the ball Looking at the ball while dribbling While dribbling, have child follow a partner (follow the leader) While partner holds the ball from the bottom, child pushes ball with finger pads Child uses pal in stead of fingers

- PHE Canada (2011). Fundamental movement skills: An educator's guide to teaching fundamental movement skills.
- Ulrich, D. (2000). Test of Gross Motor Development, 2nd ed. (TGMD-2) Assessment protocol Gallahue, D., Ozmun, J., & Goodway, J. (2007). Understanding motor development: Infant, children, adolescents, adults (7th ed.). McGraw Hill: New York, NY. 5. Poster created by Drs. Helena Baert & Matthew Madden, SUNY Cortland, 2016
- **References Continued:**
- 4. Baumgarten, S. & Langton, T. (2006). Elementary Physical Education: Building a Solid Movement Foundation. Stipes Publishing L.L.C.: Champaign, IL.